

Section-A
Multiple Choice Questions (MCQ's)

Q-01: Choose the correct answer for each from the given option.

- (i) If the function of lever is between the effort and weight, it is a _____ class lever.
(a) first (b) second (c) Third (d) none of these
- (ii) Power is defined as:
(a) Rate of change of Position. (b) Rate of change of force
(c) Time rate of doing work (d) none of these
- (iii) The centripetal force is always directed to _____.
(a) Towards the centre of circle (b) along the direction of motion
(c) Away from the centre of circle (d) none of these
- (iv) The second condition of equilibrium state that:
(a) $\sum P = 0$ (b) $\sum \tau = 0$ (c) $\sum F = 0$ (d) both (b) and (c)
- (v) If F_x and F_y are rectangular components of a force F , then $\tan \theta =$ _____.
(a) $\frac{F_x}{F_y}$ (b) $\frac{F_y}{F_x}$ (c) $F_x + F_y$ (d) $F_x - F_y$
- (vi) Friction can be reduced by using ball bearings, because they _____.
(a) Make the surface plane (b) make the surface grassy
(c) Convert sliding friction into rolling friction
(d) have no friction of their own
- (vii) 10^{-9} second is called _____.
(a) Desisecond (b) Millisecond (c) Microsecond (d) Nanosecond
- (viii) Ibn-ul-Haithem contributed toward _____ physics.
(a) Nuclear (b) Oceanographic (c) Optical (d) Thermal
- (ix) Rain drop are formed spherical in shape due to one of the following properties of water.
(a) Surface tension (b) Viscosity (c) Pressure (d) Air resistance
- (x) An element whose atoms have same atomic number but different mass number are called _____.
(a) Molecule (b) Secondary Element (c) Isotopes (d) None of these
- (xi) At S.T.P pure water boils at _____.
(a) 0 K (b) 100K (c) 273K (d) None of these
- (xii) If a current is flowing through a solenoid, then the north pole of the solenoid can be found by using _____ rules.
(a) Right hand (b) Left hand (c) Faraday's (d) Lenz's
- (xiii) If the length of the pendulum becomes four times, its time period will become _____.
(a) Four times (b) twice (c) Three times (d) Eight times
- (xiv) The substance used as a medium between the two plates of a capacitor is known as _____.
(a) Conductor (b) Semi Conductor (c) di-electric (d) electrolyte
- (xv) The image formed in a plane mirror is _____.
(a) Real (b) Inverted (c) Virtual and erect
(d) Real and inverted
- (xvi) A convex lens is _____.
(a) Thinner at the centre (b) Thicker at the centre
(c) A diverging lens (d) plane throughout
- (xvii) According to Quantum theory photons are _____.
(a) Waves (b) Electromagnetic waves
(c) Energy packets (d) Particles